IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Allen A. Aradi Application No.: 10/696,618 Filed: 10/29/2003 Title: METHOD FOR REDUCING COMBUSTION CHAMBER DEPOSIT FLAKING Attorney Docket No.: NM 7607	Group Art Unit: 1714 Examiner: Cephia D. Toomer

Commissioner of Patents
P.O. Box 1450
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RESPONSE

Dear Sir:

Applicant submits this Response to the Notice of Non-Compliant Amendment mailed August 22, 2007.

There was no amendment filed with the response on June 1, 2007. Instead, Applicant has identified the inadvertent error in the claims that were part of the Amendment and Response filed November 27, 2006. In that prior amendment, claim 26 should have been designated "Previously Presented".

The current state of the claims is as follows.

IN THE CLAIMS:

Please amend claims 1 and 15 as shown below:

1. (Previously Presented) A method of reducing combustion chamber deposit flaking in spark ignited internal combustion engines that experience combustion chamber deposits and combustion chamber deposit flaking comprising the steps of:

supplying a fuel comprising an additive that includes a metal-containing compound to a spark ignited internal combustion engine having an advanced emissions control,

wherein the metal-containing compound is supplied in an amount effective to reduce combustion chamber deposit flaking.

2. (Original) A method as described in claim 1, wherein the metal-containing compound comprises a metal selected from the group consisting of manganese, platinum, palladium, rhodium, iron, cerium, copper, nickel, silver, cobalt, and molybdenum, and mixtures thereof.

3. (Original) A method as described in claim 2, wherein the metal-containing compound comprises a manganese-containing compound.

4. (Original) The method described in claim 3, wherein the manganese-containing compound is an inorganic manganese compound.

5. (Original) The method described in claim 4, wherein the inorganic manganese compound is selected from the group consisting of fluorides, chlorides, bromides, iodides, oxides, nitrates, sulfates, phosphates, nitrides, hydrides, hydroxides, carbonates and mixtures thereof.

6. (Original) The method described in claim 3, wherein the manganese-containing compound is an organometallic compound.

7. (Original) The method described in claim 6, wherein the organometallic compound is selected from the group consisting of alcohols, aldehydes, ketones, esters, anhydrides, sulfonates, phosphonates, chelates, phenates, crown ethers, carboxylic acids, amides, acetyl acetonates and mixtures thereof.

8. (Original) The method described in claim 3, wherein the manganese-containing compound comprises about 1 to about 50 mgMn/liter of the fuel.

9. (Original) The method described in claim 6, wherein the organometallic compound comprises methylcyclopentadienyl manganese tricarbonyl.

10. (Original) The method described in claim 3, wherein the manganese-containing compound is selected from the following group: cyclopentadienyl

manganese tricarbonyl, methylcyclopentadienyl manganese tricarbonyl, dimethylcyclopentadienyl manganese tricarbonyl, trimethylcyclopentadienyl manganese tricarbonyl, tetramethylcyclopentadienyl manganese tricarbonyl, pentamethylcyclopentadienyl manganese tricarbonyl, ethylcyclopentadienyl manganese tricarbonyl, diethylcyclopentadienyl manganese tricarbonyl, propylcyclopentadienyl manganese tricarbonyl, isopropylcyclopentadienyl manganese tricarbonyl, tert-butylcyclopentadienyl manganese tricarbonyl, octylcyclopentadienyl manganese tricarbonyl, dodecylcyclopentadienyl manganese tricarbonyl, ethylmethylcyclopentadienyl manganese tricarbonyl, indenyl manganese tricarbonyl, and the like, including mixtures of two or more such compounds.

11. (Original) A method as described in claim 1, wherein the fuel contains less than about 30 ppm of sulfur.

12. (Previously Presented) The method as described in claim 1, wherein the spark ignited internal combustion engine comprises a direct injection gasoline system.

13. (Original) The method as described in claim 1, wherein the fuel comprises regular, unleaded gasoline.

14. (Original) The method as described in claim 1, wherein the engine comprises six or more cylinders.

15. (Previously Presented) A method of reducing cold start emissions from spark-ignited internal combustion engines that experience combustion chamber deposits and combustion chamber deposit flaking comprising the steps of:

supplying a fuel comprising an additive that includes a metal-containing compound to a spark ignited internal combustion engine having an advanced emissions control;

wherein the metal-containing compound is supplied in an amount effective to reduce cold start emissions.

16. (Original) A method as described in claim 15, wherein the metal-containing compound comprises a metal selected from the group consisting of manganese, platinum, palladium, rhodium, iron, cerium, copper, nickel, silver, cobalt, and molybdenum, and mixtures thereof.

17. (Original) A method as described in claim 16, wherein the metal-containing compound comprises a manganese compound.

18. (Original) The method described in claim 17, wherein the manganese-containing compound is an inorganic manganese compound.

19. (Original) The method described in claim 18, wherein the inorganic manganese compound is selected from the group consisting of fluorides, chlorides, bromides, iodides, oxides, nitrates, sulfates, phosphates, nitrides, hydrides, hydroxides carbonates and mixtures thereof.

20. (Original) The method described in claim 17, wherein the manganese-containing compound is an organometallic compound.

21. (Original) The method described in claim 20, wherein the organometallic compound is selected from the group consisting of alcohols, aldehydes, ketones, esters, anhydrides, sulfonates, phosphonates, chelates, phenates, crown ethers, carboxylic acids, amides, acetyl acetonates and mixtures thereof.

22. (Original) The method described in claim 17, wherein the manganese-containing compound comprises about 1 to about 50 mgMn/liter of the fuel.

23. (Original) The method described in claim 20, wherein the organometallic compound comprises methylcyclopentadienyl manganese tricarbonyl.

24. (Original) The method described in claim 17, wherein the manganese-containing compound is selected from the following group: cyclopentadienyl manganese tricarbonyl, methylcyclopentadienyl manganese tricarbonyl,

dimethylcyclopentadienyl manganese tricarbonyl, trimethylcyclopentadienyl manganese tricarbonyl, tetramethylcyclopentadienyl manganese tricarbonyl, pentamethylcyclopentadienyl manganese tricarbonyl, ethylcyclopentadienyl manganese tricarbonyl, diethylcyclopentadienyl manganese tricarbonyl, propylcyclopentadienyl manganese tricarbonyl, isopropylcyclopentadienyl manganese tricarbonyl, tert-butylcyclopentadienyl manganese tricarbonyl, octylcyclopentadienyl manganese tricarbonyl, dodecylcyclopentadienyl manganese tricarbonyl, ethylmethylcyclopentadienyl manganese tricarbonyl, indenyl manganese tricarbonyl, and the like, including mixtures of two or more such compounds.

25. (Original) A method as described in claim 15, where the fuel contains less than about 30 ppm of sulfur.

26. (Previously Presented) The method as described in claim 15, wherein the spark ignited internal combustion engine comprises direct injection gasoline system.

27. (Original) The method as described in claim 15, wherein the fuel comprises regular, unleaded gasoline.

28. (Original) The method as described in claim 15, wherein the engine comprises six or more cylinders.